VOLUME 93 NUMBER 24

CAMBRIDGE, MASSACHUSETTS

ropose

By Mike McNamee

The MIT Planning Office last week released a study of a proposed \$20 million truck route that would pass near the Institute. The study concludes that this road, offered by the Boston Traffic Planning Review (BTPR) as a solution to Cambridge's traffic problems, would seriously hamper research done at many MIT facilities.

The MIT report was prepared by the Planning Office to study the effects of a truck route proposed by the BTPR. The proposal, made last December, was BTPR's response to Cambridge residents who have protested the heavy truck traffic on the main roads in the city. The proposed route would run below the BU Bridge, and follow the railroad tracks that run behind MIT; it would pass under Massachusetts Avenue near Vassar Street, continue across Kendall Square, and follow Binney Street to Commercial Street, which it would follow out of Cambridge. O. Robert Simha, head of the MIT Planning Office, pointed out that this route is very similar to the proposed "Inner Belt" highway which MIT successfully opposed several years ago.

Simha, at a press conference held to announce the report's release, said that BPTR had asked MIT for reaction to the road proposal early this year. The Planning Office conducted a study of the effects such a road would have on residents of Eastgate and Westgate, and on the research done at laboratories along the route, including the National Magnet Labs, Draper Labs, and the MIT Nuclear Re-

The study showed that the road would probably increase pollution, vibration, noise, and electronic problems already caused by the truck traffic in

Cambridge, and would concentrate these problems in one area. The proposed route would involve many up- and downgrades, which would mean trucks would have to use more power and would create more pollution and

The study also showed that research at the many facilities along the route would be greatly endangered by the additional traffic. The Magnet Labs, for example, would have to reroute a pipeline that provides cooling water for its facilities, and its research would be greatly disrupted by the construction of the road. The Nuclear Reactor would be endangered also, as the Atomic Energy Commission might consider the increased traffic enough of a safety hazard to deny renewal of the Reactor's license. Increased vibration and pollution would threaten research at Draper Labs, the Center for Space Research, the Hydrodynamics Lab, and in Building 20.

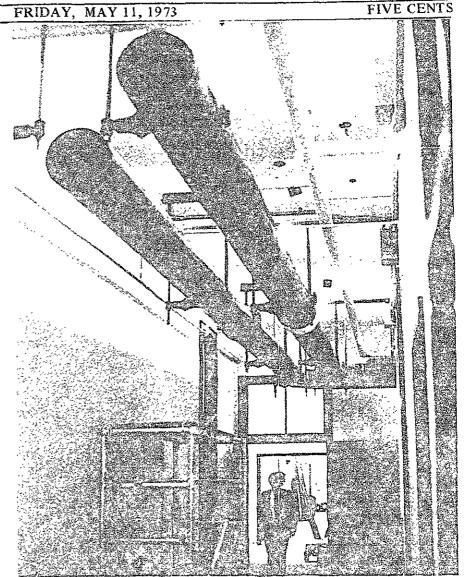
Many residents of Westgate and Eastgate, according to the report, already find truck traffic to be very annoying, and are opposed to any plans for a new road. The report also mentioned harmful effects the proposed route would have on MIT's relations with the surrounding community.

"We conducted a thorough study of the problem, and got quite a lot of help from students and faculty on technical aspects," Simha said. "We concluded that it would be unwise to build any road to handle the truck problem until all other ways of rerouting the traffic had been studied." Simha mentioned three alternatives which BTPR could use to alleviate the prob-1) Use existing legal means to control truck traffic. According to Simha, the city of Cambridge has the authority to

stop all truck traffic in the city at night, or to set limits on the size of trucks using city streets.

2) Divert intercity traffic onto other roads. "Only 10% of the truck traffic in Cambridge is intercity," Simha noted, "but these trucks all use the same two or three roads. This traffic could be diverted onto other routes, which would alleviate the probiem along Mass. Ave., Prospect/River Streets, and Main Street, where most of the trucks go now."

3) Study the real needs of the city before building anything. Simha stressed that, while Cambridge was once a terminal city for many trucking companies, the nature of the city is changing, and transportation policy should reflect this change. "A lot of traffic could be eliminated," Simha said, "if a pipeline was built from the oil depots in the suburbs in to the Cambridge gas stations. This would eliminate some of the worst traffic, the tankers that currently bring in the gasoline. These are the sort of solutions we feel that the BTPR should be considering."



These pipes will connect the Med Dept with the refrigeration plant.

Photo by Ralph Neuberger

Air conditioning for MIT?

By Bert Halstead

To allow for central air conditioning in the Medical Department Building, the Institute is currently installing chilled water pipes to link the Medical Department (Building 11) with the central MIT refrigeration plant.

The pipes link the central refrigeration plant to the main group of MIT campus buildings. and suggest the possibility, exciting to anybody who has ever spent a summer in Boston, that the air conditioning might some day be extended to the other

campus buildings. According to Richard Sorenson, Assistant to the Vice President for Operations, the "potential to serve more than Building 11" is there, but that does not imply that any action in that direction is currently being planned. Superintendent for Engineering and Construction Paul Barrett explained the situation in more detail.

MIT's central refrigeration plant is still under development. Its current capacity of 6500 tons of refrigeration is slated to rise to 10,000 tons in two years. All air conditioned buildings, except for some of the older ones which have their own plants (13, 54, 56, and the Student Center), are tied into this system. It is hoped eventually to tie these buildings into the system as well, converting their "private" plants into reserve capacity. Unfortunately, expanding air conditioning into previously uncooled areas is necessarily a slow process because of the cost. One approach would be to use window units, and indeed this has been done to some extent, but this is a tremendously inefficient way to cool a building, and so in terms of long-term costeffectiveness it pays to install central air conditioning.

Due to the money problem,

though, air conditioning is likely to come to the Institute through the back door, and it will take a very long time getting here. A major portion of the building improvement and renovation done by Physical Plant is done under the so-called "space change program." What happens is that when a department starts a new laboratory or other project, or needs more room for another professor or for some other reason, a request is made to have the area appropriately remodeled. If the cost of central air conditioning can be justified, it will be installed, and another small corner of the Institute will have been added to the system. If not ...

Unfortunately, the once \$400,000 budget of this program has in recent years been reduced to somewhat less than that, and this has necessitated more paring down of space change requests. In addition to space changes, Barrett's office oversees a wide vareity of other activities, many of them dwarfing the air conditioning work in scale.

A totally air conditioned campus? It's not around the corner. It isn't even near. But there does seem to be a trend in that direction.

Killian picked to head



By Paul E. Schindler and Norman D. Sandler

In a move intended to prove that public television is free from political constraints, James B. Killian, Jr., Honorary Chairman of the MIT Corporation, was elected chairman of the Corporation for Public Broadcasting Wednesday.

The former MIT Corporation chairman has been serving as vice chairman of the board of the Corporation, and was selected Wednesday at a meeting held at the Harvard Club in New York to succeed outgoing chairman Thomas B. Curtis. Curtis resigned from the board of CPB because, he claimed, the White House had put pressure on certain members of the board in the past. Curtis felt that this constituted a violation of the Corporation's supposed independence from politics.

Killian told The Tech that CPB would continue to promote politically independent public television programming in the future, explaining that he accepted the position "in order to insure that public television moves ahead as a way of demonstrating its independence from all political ties." He added that he had not been contacted by anyone at the White House concerning his appointment either prior to or following Wednesday's meeting in New York.

In a statement released to the press after his election, Killian called the chairmanship a "challenge" to accomplish four goals: speedy completion of negotiations with PBS (which represents the local stations in the educational network), long range financing for CPB, increased autonomy and independence for local stations, and a reaffirmation of the importance of public affairs programs as an essential responsibility of public broadcasting.

(Many of the recent disputes involving CPB have to do with its cancellation of funding for public affairs programs that are not "balanced." The previous chairman of CPB resigned because of what he termed "White

House pressure" applied to members of his board. -Editor)

The statement also noted Killian's designation as "the father of public television," which he earned when he headed up the Carnegie Commission on Educational Television in 1967. Congress passed the Public Broadcasting Act as a result of that

In a separate statement of principles issued by the board. the CPB promised that if "adequate funds become available we will move rapidly to fund more programs, including public affairs."

voriety OUIS!

By David Olive and Richard Parker

"Chemistry is a weird department. You go through the courses hating it and then find that when you've finished you've learned an awful lot ... "

MIT's Course V, Chemistry, is one which covers a field whose breadth is astounding. The department consists of a large variety of chemistry divisions, with each possessing good facilities and faculty. Courses, though few in number, have enormous amounts of material packed into them, and are rated

fairly well by students. Labs are controversial, but otherwise the department on the whole is exceptionally well received.

The Chemistry Department is itself divided into a number of sub-divisions. The three predominant subgroupings are inorganic, organic, and physical chemistry. Also, contained within the Course V structure to a lesser degree are analytical chemistry and biochemistry, though the latter is more comprehensively contained in the Biology Department.

"We like to say we don't have

any divisions," claims Professor Glenn Berchtold, head of Course V. Indeed, there are good arguments to support the comment, for many chemists of one category often do selected work in another. However, such claims are not convincing enough to override the obvious separating factors, the foremost being the location of organic chemists in building 18 and the physical and inorganic chemists in building 6. "Yes, the physical separation is a bit of a problem," admits Professor Fred Greene, an organic

(Continued on page 2)

Course V: breadth and variety

(Continued from page 1) chemist.

Professor John Ross sees other factors contributing to the division of fields: "Since chemistry has achieved such a degree of understanding, our knowledge has literally spread the field apart. Here at MIT any physicist could probably teach every undergraduate physics course. This would not be true with chemistry, or if it were, the professors would not do a very good job. The field has become very diverse."

Requirements in Course V have been relaxed considerably in recent years. In the past, three courses in both organic and physical chemistry were required, as well as two courses in inorganic chemistry and three labs. Today, however, only two organic and physical courses are required, to be supplemented by one inorganic course and the three semester labs with an added requirement of one advanced course in one of the areas. "The reason we reduced the requirements," states Berchtold, "was mainly because of student criticism. They claimed the structure was too rigid and did not allow flexibility."

Still, it seems to this reporter that the requirements are more than moderately rigorous, even in their reduced form. Yet this quality may serve as an attribute to the department, "The requirements are very good." asserts Kathryn Browning, a sophomore in Course V. "They literally force you to take up new horizons. I would never study some of this stuff were it not required. And they aren't too tough. You get plenty of elective time, which enables you to further investigate your interests. The courses themselves are OK. There seems to be a slight orientation toward organic chemistry. but other courses are offered which enable you to shift the balance." It seems that though there are many requirements, they provide a coherent program of study in chemistry and for the most part cannot be criticized too strongly.

The one major exception is Course V's "integrated lab program." According to Berchtold, the three semester lab sequence "is one of the few around the country which offers more than a mix of classical experiments." "Here at MIT," echoes Ross, "our purpose with labs is not to make great discoveries, but rather to teach the student the techniques, procedures, and methods of the laboratory." Students, however, view the labs in another way. "Those labs are very time consuming, probably a waste of time," states Barbara Freeman, a sophomore pre-med.

"The labs are ridiculous," claims Browning. "They are long, time consuming, and the opinion of most students is that they are overworked." She claims that this is clearly demon-

strated by lab attendance. "Labs are open from 9 to 5, and there are always a number of students working to catch up. On days immediately preceding the date lab reports are due the students work exhorbitant hours!"

In addition, there is another major problem with the labs which the department does not know how to cope with. "When the labs were originally designed, they were shaped for 150 students maximum. Presently there is an enrollment of 300. This is a tremendous problem. and has only two solutions. The first is to limit the size of the labs, which we cannot do. The second is to provide each student with insufficient attention, which unfortunately has been the case." Though designed with good intent, it seems the Laboratory Program as it exists today is the one basic criticism of the department, and stands probably as the best single factor to dissuade students from becoming chemistry majors.

Two Course V courses - 5.41 and 5.60 - receive large portions of the undergraduate population fulfilling the Institute Chemistry requirement. The present 5.41 course is basically an introduction to organic chemistry. although it's "not the traditional organic chemistry course by any means." The course was designed by Professor Dan Kemp as a coherent, interesting program of basic chemistry ideas. With these goals, Kemp designed the course to be more or less a qualitative chemistry course rather than quantitative. Though Kemp was unavailable for interviewing, Greene, who taught the course last fall, volunteered his comments. "We distributed a questionnaire among the students in the course, and most of the results seem favorable "

The students we interviewed had some varying opinions. According to Freeman: "Either you got it or you didn't, you tended to get messed up." "Yes, I suffered through it (5.41)," Browning says, "I guess for a chemistry student it's good to break you in. There was one major problem: if you had no background, the task was too much. If you had some background, you became overconfident and didn't do the work. It was a crazy situation that was difficult to win." Many professors in the department have taught 5.41, but most have been exceedingly boring. If you can, take the course with Kemp ... He is by far the best.

The second most widely solicited course is 5.60. In the fall an average of 200-250 students take the course, while over 300 sign up in the spring. The one statement which can best summarize the course is "tough but very good." Ross teaches the course frequently, and intends to teach it again next fall. In his opinion, "5.60 is loaded with

people who know they need the course. The only possible exception is pre-med students. All others — chemists, chemical engineers, and the rest — they all know they have to learn the material."

Student evaluations in the past have said the course is pretty good: "We have had some criticism with our lecture system, so we have presented other options to those students who so desire one." Recitations, however, have been a sore spot for the course. "Yes, recitations, I'm afraid, are a bit on the poor side. But this is usually due to students who will not admit they cannot work a problem and T.A.'s who are inexperienced and cannot draw the problems out." Yet overall the course rates well, and even provides the student with an honest evaluation of his work: "If you don't know how to do the problems, you can honestly tell yourself you don't understand it!"

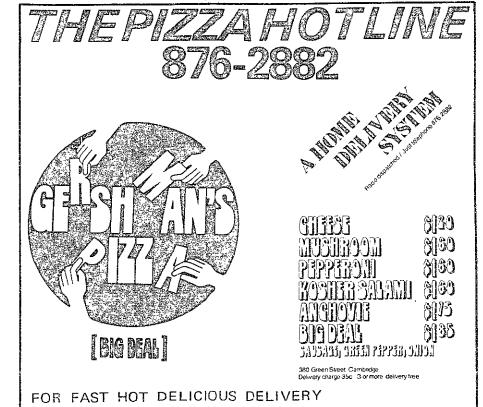
Chemistry research, though no longer required, remains an integral part of the undergraduate program. There are presently about 30 students doing research, yet Berchtold claims the department is not up to capacity. Ross elaborates: "Though there is not an excessive number of students doing research, those who are are given the remarkable opportunity of working and socializing with grad students and post-doctorates. The research is tough, but the student gains valuable insight and experience." It was Ross' opinion that an increase in desks and work benches would serve to attract more undergraduates to research. "I think if every undergrad interested in research were given his own desk in the lab, we would certainly attract more. It would in essence help to reshape their social life. Students find that once given this position of responsibility in research, they seep out of the

dormitory-fraternity crowd and become more socially involved with those in the lab."

Last week's article on Course VII presented the suggestion that they organize a series of seminars where each professor doing research could explain his work with the department students. Amazingly enough, the chemistry department beat us to the punch... by four years! In 1968, an undergraduate seminar program was initiated. Originally christened 5.89, the course was just such a seminar as we recommended, yet would give two units of credit to each student who registered. However, the administration did not like the idea and turned down the proposal, so the program has continued on a creditless basis since that time. "Attendance has not been great," says Berchtold, "but it is sufficient to warrant the program." Students who attend usually are glad of it, according to Browning. "There are many things to gain from going. First, these are MIT chemistry professors and they can give you an insight into your future as a chemist. Imagine listening to a guy talk about how he spent five years researching something you thought was trivial!" Kathryn adds that though the seminars may be geared to graduates, they do present a good overview.

The chemistry department as a whole seems to be pretty good, although the labs are a problem, the classes are not the most exciting, and the lecturers aren't always great. When Ross was asked what he considered the greatest strengths of the department, he replied, "Well, the library is good." But overall, the department seems to be a good one to get involved with. "We have large multifunction activities," explained Ross,, "Undergraduates, pre-med students, grad students, and post-docs all

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New health plan available

By Wendy Peikes

The new MIT Health Plan, originally limited to one thouand employees and their famiies, will be extended to include 75 students. The plan is an experimental one, offered by the Medical Department in cooperaion with Blue Cross and Blue

The fee paid by members of he plan covers many services not included in either of the present student plans (required and optional) or the present employee plan. Among the services participants in the new olan receive without charge are nospital visits, specialists' serrices, maternity care including bortions, and preventive serlices such as immunizations, inections, and periodic checkups. According to Laurence Bishoff, Assistant Director of he MIT Medical Department, 'The plan will make access to nedical care easier for many members of the MIT community by having medical services prepaid. A person won't have to decide whether it's worth it or not to spend \$10 to see a doc-

By Thomas Kervin

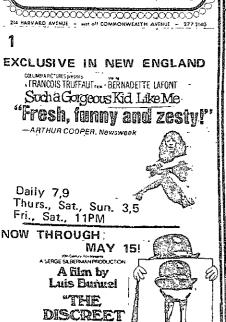
In the awards convocation aeld in Kresge Little Theater yesterday at 11 am, 23 students, eight faculty, two organizations and two students were honored for their contributions to the MIT community. Linda Tufts, co-UAP presided.

Several persons associated with The Tech won awards, including former chairman Robert Elkin, who received a Stewart award, and Sports Editor Sandra Yulke, who got the Pewter Bowl for outstanding contributions to women's athletics. Steve Wallman won a Stewart for his work and that of the Student Center Committee.

The other Stewart awards, for outstanding contributions to extracurricular life at MIT, went to Arthur Eass, Maria Bozzuto, Sylvester Gates, Lee Scheffler, Vo Ta Han, and James Ziegenmeyer. The Class of '48 award for outstanding athlete went to David Wilson. Three faculty shared the Everett Moore Baker Award for Outstanding Undergraduate Teaching: Sandy Kaye of Humanities, Richard Naylor of Earth and Planetary Sciences, and James Williams of Mechanical Engineering. The James N. Murphy award for spirited contributions to the Institute by an employee was presented to Beatrice Santos by Dr. Jerome B. Wiesner.

A complete listing of the awards and descriptions will appear in Tuesday's paper.

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visit, he'll go for medical attention whenever it is necessary." The plan will also help to reduce unnecessary hospitalization by allowing members access to unlimited preventive services and diagnostic tests administered at the Medical Department.

Services excluded from coverage include eyeglasses, contact lenses, cosmetic surgery, and most dental care.

MIT, as an employer, contributes to the cost of its faculty and staff health plans. Students, however, must pay the full cost of medical insurance. The exact amount that must be paid has not yet been decided by Blue Cross and Blue Shield; the present estimate is \$53.00 a month for a student and his family, and \$22.00 a month for a single student.

The deadline for applying for membership is June 1, 1973. Expenses incurred during or after July will be covered for those who applied before the deadline. Applications will be

tor. If he is not charged for each accepted throughout the summer if 175 students have not expressed interest in the program by June. If more students desire membership than can be accomodated, a lottery will be held for the openings.

Although the plan is available to all (except special) students, it is aimed chiefly at those who are married. It is especially convenient for those students married to MIT employees, since the \$122 they pay for the mandatory health insurance plan can be applied towards the cost of this program.

Because of the significantly greater cost of this new option available to students, it is not expected to interest more students than it can enroll. At present, about 40% of the student body have the optional medical insurance available at the cost of \$54 a year, which includes hospital and accident insurance. The required medical fee of \$122 annually pays for only care given in and by the MIT Medical Department.

PLUS- A new one by Lettvin!!

INTERACTIVE LECTURES

COSMOLOGY

by Prof. Philip Morrison, MIT

IMPLICATIONS OF THE APOLLO 11 LUNAR MATERIAL by Dr. John A. Wood, Smithsonian Observatory.

SYMBIOTIC THEORY OF THE ORIGIN OF HIGHER CELLS by Prof. Lynn Margulis, Boston University

EXPERIMENTS ON THE ORIGIN OF LIFE by Prof. Carl Sagan, Cornell

LEAF INSECTS, BIRDS, AND HUMAN COLOR VISION by Prof. Jerome Lettvin, MIT

Students who are curious about the topics above are invited to use an experimental system containing these interactive lectures; which were recorded specifically for individual listening. The lectures are unique in that they include a great many recorded answers to interesting questions. The answers extend and deepen the discussion, and can be quickly and conveniently accessed.

If you would like to try the system, please call 864-6000, ext. 2800, or write a short note to Stewart Wilson, Polaroid, 730 Main St., Cambridge (near MIT), mentioning when you might be free and how you can be reached.

SPRING & SUMMER 1973

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STATE INSPECTION PERIOD APRIL 1st to MAY 15th

To: All Students, Staff and Faculty Dean Carola Eisenberg From: May 9, 1973 Date:

The unauthorized possession of master keys to Institute academic and residential buildings has become a matter of grave concern to many students, faculty and staff. Our office has been asked to take action to correct this serious threat to personal and Institutional security. I am asking the cooperation of members of the MIT community in coping with what has become a hazard to all.

The master lock system exists for two primary purposes: access in the event of an emergency (fire, laboratory malfunction, personal injury and so on) and access for the essential functions of build-

ing maintenance.

When master keys fall into unauthorized hands, the security of all MIT buildings is correspondingly threatened. The growing risk of theft has led students to barricade or lock their own rooms in a fashion that can interfere with the provision of aid in am emergency. In the face of acts of indiscriminate vandalism or intentional burglary, faculty and staff are troubled by the uncertain security of scholarly and personnel data, examinations and personal files.

I assume that most owners of such keys have acquired them for personal convenience without having thought through the consequences for the Institute as a whole. But we have encountered instances when they have been employed for deliberate theft. If lost, master keys can be used by those who find them to the detriment of all.

Therefore, after consulting with the Chancellor, the Chairman of the Faculty, Campus Patrol, Dormitory Council and others, I offer amnesty between now and the end of the month for everyone who now possesses master keys without authority, if the keys are placed anonymously in sealed envelopes for transmission via Institute mail to the Office of the Dean for Student Affairs. Thereafter, all those found to be in possession of such keys without authorization will be referred to the House Judicial Committee or the Faculty Committee on Discipline, for prompt hearings and appropriate disciplinary action.

The success of this method of resolv-

ing a difficult security problem depends entirely on the cooperation of the MIT community. I urge you to see that those you know who have such keys return them. If they fail to do so, disciplinary action will follow. Should that prove necessary, it will be greatly to my distress for it will be a measure of our failure to have created a sense of a responsible community at MIT.

To the Editor:

As participants in the MIT-Wellesley information booth, which is designed to dispense information about Wellesley courses to the MIT community, we have found ourselves listening to a suprising amount of abuse directed towards MIT women from MIT men. In standing up for coeds, we cannot help feeling rather sanctimonious, as coeds apparently have little affection for Wellesley women. This is unfortunate, as a coalition of MIT and Wellesley women would benefit both groups.

Misconceptions and stereotypes abound. The MIT woman is assumed to be a hopeless "gnurd" with few, if any, social graces. The Wellesley student is pictured as a frivolous refugee from the cotillion circuit, laying in wait until a Harvard man strays into her path. Such gross parodies are inaccurate and damaging to women at both institutions (but particularly at MIT, where the position of women is much more precarious).

We propose, therefore, that planning for the aforementioned coalition be put into effect at the present moment. We would like to put an end to these misconceptions with a series of informal meetings, to start now. We hope MIT women share our feelings.

> Karen Dolmatch Anne Moran

To the Editor:

I would like to comment on the recently enacted limit on freshman credits at the recent faculty meeting.

Like many of the faculty, I believe that scholarship in depth has great value and that too much dispersal of students' efforts mitigates against such scholarship. However, I have found in conversations with freshmen that many focus their energies upon a few courses and learn

them in depth, which satisfies the scholarship requirement to my mind. In addition, many use the no-limit system to sample lightly other areas, honestly admitting that it was only a light touch. Also, I believe that serious effort in a course is often determined by the quality of the course and the level of effort required. In short, it is not clear to me that there now exists a serious scholarship problem or that the new limit will make any substantial difference in how students will spend time in the courses they must take.

What does concern me, however, about the present no-limit system is the apparent existence of an institutional pressure to take heavy loads. This can be generated through one's peers or more likely by oneself ("I ought to do it if I am able"). I am personally convinced that this pressure artificially affects some students' plans and in some cases is detrimental to their long range goals.

Some students truly have the ability to take heavier loads and to do very well and want the freedom to do so; others wish to explore academic areas with an overload but with a minimal investment of effort and time (e.g., attend lectures only); still others prefer to use their time for cultural, social, or athletic activities. As I see it, the new system allows for all of these modes but without the present bias toward formal academic course work. A student can "overload" to learn deeply and to explore via the listener status. In addition, I am confident that, in many cases, he will be able to satisfy departmental prerequisites for more advanced courses. However, he will be rewarded no more than the student who chooses to do casual or in-depth library reading, to attend departmental seminars, to participate deeply or casually in musical, athletic, or social activities, on campus or elsewhere. In short, I would hope that the 60/63 limit system would allow members of the class of 1977 to have the ultimate freedom to use their free time to do anything they wish on or off the campus, whether it be academic, extracurricular, or simply nothing. One should remember that Boston offers a rich cultural and intellectual life for the students who choose to participate in it.

It is important that 60 units/term allows a student to graduate in three years if he is able to do so and so chooses. Also, I hope that 60/63 units does not become a "goal" or norm for students whose other activities, abilities, or preparation make 45 or even 36 units a more appropriate load during the freshman

In summary, I would think that the credit limit together with the single pass grade, the no-transcript "F," and the free (i.e., no extra tuition) listener status constitutes the least pressured and most flexible educational system the Institute could present to the class of 1977.

Hale Bradt, Chairman, Freshman Advisory Council Professor of Physics

LETTERS

Letters to The Tech are run on a space available basis. They are never cut.

Letters are run at the discretion of the Editor-in-Chief; the decision is, based on factors of brevity, community interest, and/or introduction of new and interesting information. All letters must be signed, although signatures may be witheld on request. Letters that are not typewritten will not be considered.

Continuous News Service



Vol. XCIII No. 24

May 11, 1973

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)pen meetings: a good idea

(OK, this is your chance. If you have ever felt screwed, either by tuition or by financial aid, you will have a chance to see the people in charge, person to person and face to face. These two meetings are experiments: attempts to answer questions and make explanations, and yes, maybe even take suggestions!. So, if you want to know what's going on, go. -PES)

From: Paul E. Grav

Subject: Meeting Concerning Tuition

On Monday, May 14 at 4 pm in Room 10-250, there will be a meeting at which the general issue of tuition charges can be discussed. The meeting is open to all interested members of the MIT community.

As you know, the tuition for the 1973-74 year was announced nine months ago as \$3,100, an increase of \$200 over the present charge of \$2,900. The tuition for the 1974-75 year will be determined during the next two months.

This open meeting is intended to provide an opportunity for a discussion of the factors that influence tuition, and to give those who would like to raise

the wizard of id

questions or express viewpoints concerning the Institute tuition policy a chance to do so. I will open the meeting with a brief presentation concerning recent tuition history, comparisons with the cost of education at MIT, with academic program costs, with tuition charges at other private universities, and with changes in the cost of living and median family income. Several of my colleagues will be present to join in the discussion.

I regard this open meeting as an experiment and as neither a forum for the development of hard positions nor a commitment to continue in the future with open meetings for the discussion of this or other issues of wide interest. Rather, I see it as an effort to try to increase the understanding within the MIT community of a complex issue and to give concerned persons a chance to be heard.

From: Student Financial Aid Office Subject: Meeting Concerning Financial Aid

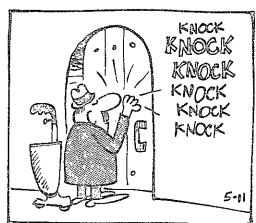
On Thursday and Friday, May 17 and 18, the MIT Financial Aid Office would like to invite all interested students to an open discussion concerning financial aid

procedures for the coming (1973-74) school year. The purpose of this discussion is to highlight the changes that have been made in the reapplication process; we don't envision this session as a lecture to students. What we want to encourage, after an introductory statement on the new procedures, is dialogue that WLI make things easier in the fall.

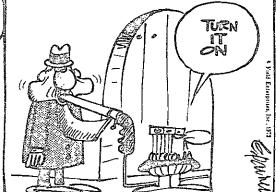
As you may already know, our office has made some small but important changes in the reapplication process to encourage more realism and cooperation in the planning of each student's budget. By mailing financial aid notices earlier than usual and by asking students to provide us with a more careful accounting of resources by the end of the summer, hopefully we can bring about the communications and pre-planning which will lead to a situation where fewer students find themselves in need of emergency counseling at the end of the year.

The Thursday meeting will take place at 3 pm in Room 10-250. The Friday meeting will begin at 10 am in the Bush Room (10-250). Hopefully this will provide enough flexibility so that those wanting to be present can be.

by Erant parker and Johany hart







The Wizard of Id appears daily and Sunday in The Boston Globe

The ited hands sedion

State of Siege in Boston

by P.E. Schindler, Jr. -

Do you remember Z? Well, this time they're doing it in "a South American country," and although they filmed it in Chile, you know it's Uruguay from the very first scene, in which we see a full frame shot of a Uruguayan license plate.

The story is supposed to have "really happened" (the name of the film, in case you haven't already heard, is State of Siege) but, as is usually the problem in such films, we have no way of telling what is real and what is made up. This is, on occasion, frustrating, although the film seldom slows down enough to let you think about it. Chances are you will not realize until you get home that it is improbable that a pair of filmmakers could know so much about the activities of the Tupemaros ... I mean the unmentionable ones (that comes from one of the many press conference scenes in the film. If you felt sorry for the journalist who disappears at the end of Z, this should make you feel better. As an aspiring journalist myself, I found myself in sympathy with the reporters).

The personnel: Well, there was Yves Montand as the American bad guy, Philip Michael Santore, a dedicated fascist who goes around training dedicated South American police forces in the world of torture and riot control. The chances are good that you have never heard of any of the other actors, which helps lend an air of authenticity to the film. There are no superstars to distract you; if the chancellor of the University were, say Charlton Heston, you might wonder where he left his tablet. The acting performances were universally good: seemingly realistic portrayals of people who were, for the most part, under pressure.

The best performances were, without question, behind the scene. Multi-kudos go to filmmaker Costa-Gavras and his scenarist Franco Solinas. They have generated a thoughtful film, heavily laden with "redeeming social importance" that is still a pleasure to watch. At times, it looks almost like a color documentary, so real do the scenes seem. I am sure you will wonder, as I did, how some of the effects of crowds and a city under siege were accomplished. Try to put the questions out of your mind in advance: accept the scenes and marvel at them.

For a change, we can have the actual opinions of the filmmakers. What were they trying to say with this film? The opinions take on new significance, in light of the contention of an official of the American Film Institute that the film "justifies assassination."

The director, Costa-Gavras: ... "Here the illegitimate violence is opposed to the legitimate violence. Between these two violences, one cannot in any case accept or justify the official violence since it is thought out, planned, and legalized."

And the scripter, Solinas: "We haven't sought to make a suspense film. We wanted to ask the public a question — not in the classic sense, will he die? But is he or is he not responsible? Guilt, not in the traditional sense — he has killed, he has robbed — but much greater. A responsibility of a political nature... he represents a system which is bad for the majority of men."

To give some justice to the other side, let's add one additional quotation, this one from an aide to John Kennedy, Arthus Schlesinger, who said it at the end of the New York premiere of the film, during a panel discussion that included the director and writer: "This film is a deformation of the work of AID... it is the only way we can help South America."

If you liked Z, or you like politics, you'll like State of Siege. At the Charles Cinema.



Costa-Gravas, director of State of Siege

Mozart and Schubert at MIT

by Peter Bosted

The MIT Glee Club, combining forces with the women's choir of Douglass College (in New Jersey), gave a quite acceptable concert of Mozart and Schubert Masses last Sunday. John Oliver did a good job in assembling a fine, professional orchestra and acheiving technically precise articulation and a clear texture. The words came through well, but the pronunciation was sometimes off and there could have been more dynamics contrast by putting more soul into the music. The sound quality was pleasing, although most of the voices were younger, and the two choirs blended well. Marylee Cirella, soprano, did an excellent if somewhat overpowering job in relation to the other three soloists.

The Mozart was unusual in its treatment of the prayer "Glory be to the Father, and to the Son. ." at the end of each section. Schubert's Mass in C Major is one of his two shorter masses, traditional in text setting except for the omission of a few of the more dogmatic phrases. Written in 1816, it follows pretty much in the Mozart-Hayden tradition, although already the subtly unusual harmonies that characterize the later Schubert are in evidence.

In case you missed this one, his other, more popular, short mass, that in G major, will be performed this Sunday at the Choral Society concert, again conducted by John Oliver. This concert will also feature an unusual piece by Britten, his Cantata Misericordium. Treated in the inimitable Britten style, this is a Latin setting of the parable of the good Samaritarian, and was commissioned by the Red Cross for a meeting in Switzerland. Other works will be Salve Regina and Exultetae Des by Poulenc and Stravinsky's very lovely Pater Noster and Ave Maria this concert should inspire you to greater heights of escapism; there is nothing more relaxing than choral music.

If, on the other hand, you are feeling over-optimistic, may I recommend Mahler's Fifth (the Giant), to be played Saturday night in Kresge. This piece is in three sections of two, one, and two movements and uses quite a formidable array of instruments (including contrabassoon and harp) and makes heavy use of the brass section. The symphony is 70 minutes long and could hardly fail to leave anyone emotionally drained at its conclusion.

American Life in Concord

by Gene Paul -

Due to a series of problems too long to explain, this review of Scenes from American Life by A.R. Gurney Jr. (a professor in the humanities department) appears after the close of its recent run in Concord. That's too bad, bacause it's not every university that has an award-winning playwright/professor whose plays are still being produced.

The Concord Players were responsible for this outing, and they did a creditable job on an outstanding, if fragmented, play. They were assisted by Professor Gurney, to the extent that he visited the group during rehearsal, and responded to their questions about the play. That was the limit to his involvement.

Since the play has already been to MIT, just a brief summary of the nature of the thing: it is a series of vignettes of the past, present, and future of Buffalo, New York (What? You say you didn't know Buffalo had a future?), which is Gurney's hometown. Most of them are very funny, but all of them are tied to



Elizabeth VanWinkle

very serious themes of repression and prejudice. The best message always comes with the best entertainment.

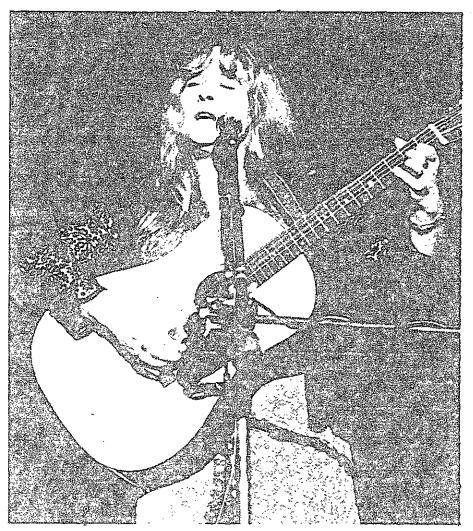
There are no really set roles, as the cast, without the benefit of costumes or much in the way of props, creates scene after scene on the nearly barren stage. Read Albright, Lillian Anderson. Christopher Childs, Louise Hannegan, Bill Maxwell, Susan Nessen, Terry Nilo, Frank K. Perkins Jr., and Elizabeth VanWinkle gave pleasant, if uneven, performances.

Direction was provided to the Concord Players' production by Patricia Butcher. It is difficult to know where to lavish the praise (mostly) and the blame (a little) for the show, on the cast or on the director. Overall, I enjoyed it, so it is probably not too important.

A special word of praise – George Albertus, the piano player, received a well-deserved round of heavy applause on a couple of occasions.



Terry Nilo



Sandy Denny

Late April brought two amazing triple-bills to Boston; the first, at Symphony Hall, featured three amazing soloists — Randy Newman, Martin Mull, and Sandy Denny. Mr. Newman was the headliner of the show, but as it turned out, his somewhat sloppy and dragging set proved to be anticlimactic after brillant first and second acts.

Ms. Denny, a Britisher and ex-member of Fairport Convention and Fotheringay, opened with a beautiful, crystalline batch of songs; nerves and an alcoholic haze were beaten out by her superb voice and capable accompaniment. But it was local sensation Martin Mull (and his Fabulous Furniture) who highlighted the night. His mixture of clowning, music, and insanity was delightful; he will be playing this weekend at Sanders Theater, and he shouldn't be missed.

Rockin' (and folkin') ...

reviews by Neal Vitale ————





The many faces of Martin Mull







Shawn Phillips



Frank Zappa

These two artists are exceedingly brillant and more than just competent; yet in Boston concerts recently, they have been primproviders of sheer boredom. Shawn Phillips, in a Sunday nigh half-capacity show at Symphony Hall, mixed a solo, acoustic se with a loud, hard-rock, band-backed one; the latter consisted primarily of two rambling, interminable "songs" that would drive even the most open-minded listener to distraction. Mr. Phillips lack a perspective on his audience, and that fact tends to obscure his definite brillance; he plays numbers and grinds them into the ears of the crowd until the irritation is of epic proportions.

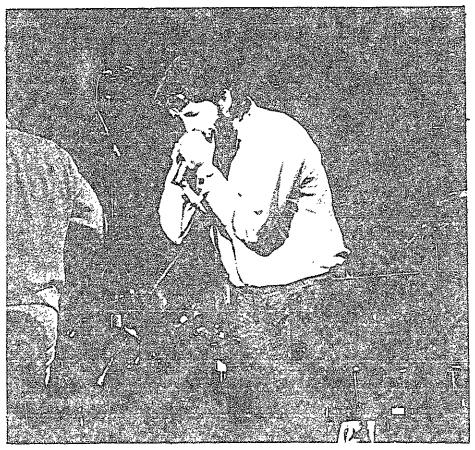
In a similar manner, Frank Zappa and the Mothers of Invention playing last Tuesday night at the Music Hall, imposed the same sor of uncomfortable dullness. Despite the presence of French violinis Jean-Luc Ponty, the allusions by Zappa to Boolean algebra an harmonic analysis, and Zappa's innate humor, the audience was buried in somnolence; after an hour and a half it became unbearable

... around Boston

- concert photos by Roger Goldstein



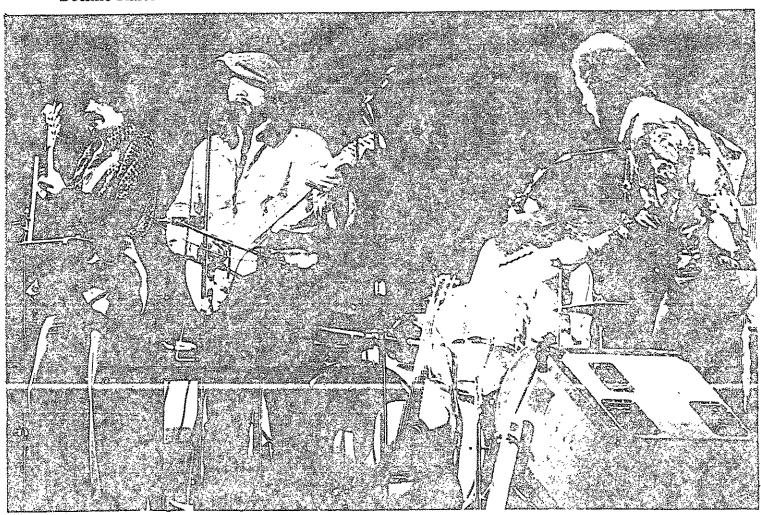
Bonnie Raitt



Paul Butterfield

The second triple-bill of late April graced the Orpheum with Little Feat, Bonnie Raitt, and Paul Butterfield's Better Days; the result was a musically unified evening that ranks among the best concerts so far in 1973. Yet, as with the Newman-Mull-Denny gig, the first two acts stole the show.

Hollywood's Little Feat, led by Lowell George, turned in a fast-paced, high-energy, very tight set. Things didn't jell into midway through their performance, but from then on, it was torrid. After Little Feat's powerdrenched climax, a very strung out Bonnie Raitt, with resident bassist Freebo in tow, took the stage. Her parcel of tunes was gorgeous, adequately displaying her abilities - vocally, on guitar, and in choosing material. Whether playing alone, with only bass, or with various members of her current studio band, Little Feat, Ms. Raitt was smooth and strong. Better Days are an extremely able grouping, but after the polished appeal of Bonnie Raitt and the electricity of Little Feat, it was all denouement.



Little Feat, with Lowell George (wearing hat)



Faces (l. to r.) - Ian McLagan, Ron Wood, Ron Lane, Rod Stewart, and Kenny Jones

Starting off the month of May was yet another three-act bonanza, at the Boston Garden; but this time around, the quality varied greatly among the groups. Starting the night were Jo Jo Gunne, who rank as one of the best American rock bands, if not the best. But the sound system reinforced the group's noisy lack of organization, and the result was no where near the level of their set of about a year ago, as first act before Lee Michaels, when they were simply great.

The Doobie Brothers followed with their patented speedy, country-ish pop/rock. Despite the decibels, the only word to describe them would be boring. But then, the Faces lurched on stage, and with that same lurching looseness, played better than I had ever heard them do before (in four previous concerts). Rod Stewart has combined bits of Marcel Marceau and Rudolph Nuryev into his theatricality; despite the weakness of some of the Faces' material (which predominated at the Garden), a concert by Stewart and friends remains one of the most entertaining in all of rock.

Watergate: will Nixon last?

By Howard Sitzer

With the recent developments in the Watergate scandal and related incidents of political spying which have been uncovered in Washington, the question now is how the President will be affected, In an informal discussion Wednesday afternoon, MIT Professor of Political Science Walter Dean Burnham presented his suggestion: impeachment.

Burnham is one of the nation's foremost authorities on electoral politics. He declined to elaborate in any detail on recent developments in the case, but focused on what he termed its "remedy." Burnham described the impeachment of the President as explicitly a political element applied in the nature of protection to the Republic rather than the punishment of an individual.

He cited Nixon's attempt to cover up the scandal "in the name of national security" and his unprecedented extention of Executive Privilege as a policy that "cannot be viewed as anything other than highly suspicious." In essence, Burnham feels that the Congress will probably have enough for a very strong case.

Burnham expounded on four themes that Nixon would likely resort to in order to countenance his seventh crisis. The basic arguments were that of "Imbecility;" "Necessity;" "Political Religion;" and "National Unity." In his address to the nation on April 30, the President presented the argument of imbecility by contending that he didn't know what was occurring. Burnham suggested that Nixon's long associations with certain people, his previous claims of tight campaign management, and previous use of similar tactics applied in the past tend to refute this line of defense.

In order to evade an impeachment proceeding, the President could revert to the argument of necessity, emphasizing the tense international situation. This would require that people cease to directly assail the Office of the Presidency since preoccupation with impeachment could endanger the nation's security. Burnham countered that the preservation of our constitutional process was no less a matter of national security than the United States' position in the arena of world affairs.

The argument of political religion could also gather momentum among the President's national constituency. The Presidency is viewed as the "fountainhead of American democracy," and this reverence for the office could be a significant impediment to carrying out our constitutional obligation. However, Burnham reminded the group that the President is only a mortal man.

Burnham presented a cogent argument in anticipation of a

ment by the Nixon Administration for the sake of national unity. Nixon's defense could be that such a proceeding would divide the public. "However, he should have contemplated this matter beforehand," Burnham explained. He added the entire operation of the White House over the past four years has been conducted almost in a war atmosphere against those with a different point of view. The office's fanatical distrust of all other elements of the political system, including the press, the Congress, and the agencies, justified in the minds of those involved

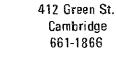
possible plea against impeach- the efforts to obstruct the political process.

Despite his personal analysis, Burnham was pessimistic on the possibilities of impeachment and predicted there would be grave ramifications on the political process.

"If the President is not removed from office or does not remove himself from the office," Burnham forewarned, "there will be no possibility of a President ever being removed from office in the future." He concluded that the long-term trend to Executive Ascendency in the Federal government may be irreversible.

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mit community players

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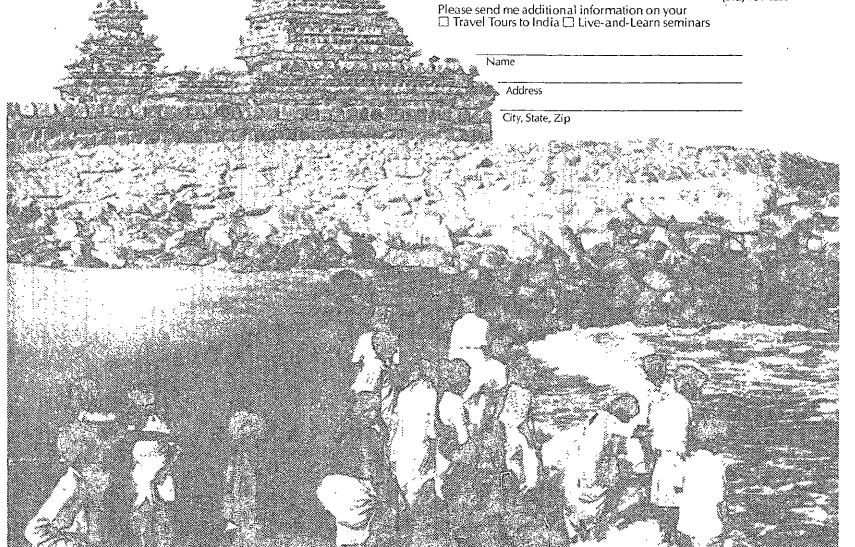
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NORTH AMERICAN ROCKWELL'S Atomics International Division is building an engineering model of the In-Vessel Handling Machine (IVHM) to be used in the Fast Flux Test Facility (FFTF) in Washington state. The FFTF will be a test installation for fast breeder fuel elements and will need three of the IVHM. The function of the IVHM is the transfer of core components between the core, in-vessel storage locations, and a core component transfer port. Able to withstand long term exposure to a 1100°F sodium environment and then reliably perform a series of complex operations in 450°F sodium, each IVHM will be 31 feet high with a maximum six-foot diameter and will weigh 54 tons.

CALIFORNIA COMPUTER PRO-DUCTS, INC. has introduced a drafting system featuring a pressure inking system that produces the best line quality plotting using liquid ink pens. It moves at speeds up to 42 inches per second with a resolution of 0.0002 inch. Vacuum hold-down assures constant quality. Combined with the CalComp's free-cursor digitizer, the plotter makes possible the updating and reproduction of maps, portions of maps, and engineering drawings. Resolution is to 0.001 inch and accuracy to 0.005.

McMILLAN ELECTRONICS COR-PORATION is producing a nitrous oxide meter sensitive to 1 ppm. It utilizes photometric detection of the chemiluminescence resulting from the flameless reaction of ozone with nitric oxide. The device has an air sampling flow rate of about a liter per minute.

RCA has developed an electronic intrusion detector that can distinguish human footsteps from other periodic noises. Known as the Energy-Peak/Time-Averaging Seismic Intrusion Detector, it was designed primarily for use in military reconnaissance and surveillance, but will be applied maintaining security of areas. Rejecting signals from low-flying aircraft, ground vehicles, and background noises such as rain and earth tremors, the sensor satisfies the important requirement of discrimination accuracy. It senses individual footsteps as energy peaks which are averaged according to their frequency of occurrence. Then the consistency of the footstep rate is determined to eliminate a series of random one-time events such as a falling branch. Once the consistency measurement satisfies specific requirements, the intruder alarm is generated and relayed to the central monitor, which may be linked with several of the sensors. [No randomizing steps, e.g. avoidance of Arrakian sandworms in Dune.] The detector can sense intruders within a radius of 150 feet from its ground contact position. The device is currently about the size of a pack of cigarettes and is expected to be reduced significantly by employing Large Scale Integration.

RCA has announced production of a pocket-size two-way radio using micro-electronic technology developed for space vehicles. The 18-ounce radio is the first commercial TR to use the high reliability integrated circuit employed in advanced satellite systems. The TACTEC (Totally Advanced Communications Technology) series, has just become available in commercial quantities with prices ranging from \$725 to \$1500, depending upon a number of optional features. Portable units are a fast-growing sector of the TR market with law enforcement agencies purchasing about a third. The new radio uses "beam-lead" integrated circuits that have no wire connections to break and cause failures, and are assembled on a substrate bases with welded interconnections. The one to six frequency radios are designed for operation in two power ranges in the UHF and VHF bands set aside for land mobile radio service. Accessories include battery chargers, multiple tone, external speaker/microphones and antennas. The smallest unit, at 18 ounces, has a single frequency and a two watt output powered by a 250 ma/hr battery.

HEWLETT-PACKARD has announced a stand-alone pulse generator to test modern higher-speed logic circuitry. Features include repetition rates to 100 MHz, variable transition time, variable offset, and a variety of output formats and operating modes. Holding a non-linearity of transition slopes below 3%, the device matches costlier instruments in measuring propagation delay and in testing wideband linear amplifiers. Pulse transition times may be varied from two ns to 250 microsec. It is externally triggered.



A Film by Claude Lelouch

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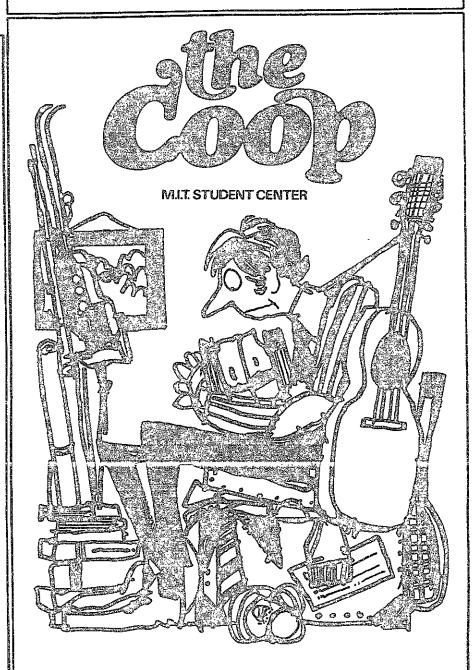
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Police Blotter

Police Blotter is a compilation prepared by Campus Patrol to report crimes occuring in the MIT community.

5/1/73

8 pm: Patrolman apprehends three juvenile runaways from Rockland, Mass. Subjects detained at HQ pending arrival of parents.

Larceny of several 10 speed, bicycles from Hermann Building Plaza — very large bolt cutters used.

Patrol apprehends five subjects in a motor vehicle at the rear of Ashdown House. Car contained three sets of bolt cutters. Two dangerous weapons seized.

5/5/73

Stolen car recovered on Amesbury St. Turned over to Cambridge PD.

5/7/73

12:30 am: Female student walking from Memorial Drive to Danforth Street was accosted by

In other news of the Campus Patrol, Chief Norman S. Sidney, who formed the modern Campus Patrol as part of the Personnel department in 1957, will be retiring at the end of June. Sidney, who has what he described as "a lot of acres" around his home in Norwalk, says he will "go fishing and mow the lawn" after retirement.

Captain James Olivieri will be promoted to Chief, according to Sidney, and will promote from within the ranks to fill the officer structure.

Sidney mentioned an ongoing effort by the Patrol to recruit ten more members, and mentioned that recruitment is difficult in light of constantly improving pay on the outside. "The Campus Patrol also has high standards," he noted.

Sidney described the Patrol's philosophy as "not being strictly dedicated to prosecution." The Patrol has found a process of "unraveling," use of the Dean's office and house judicial system, and just plain talking, to be effective in prevention work at MIT. "This policy has paid dividents in our association with students."

Olivieri intends to continue Sidney's policies, but he told The Tech that there is currently a "serious evaluation" of the working process of Campus Patrol, to determine whether the current policies are still work-

> TO MEMBERS OF THE

If you did not receive your ballot in the mail for the election of directors of the Harvard Cooperative Society, you may, upon presentation of proper identification, obtain one from the Cashier's Office on the mezzanine level of the Coop's Harvard Square Store.

The deadline for voting is

May 21.



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a male, approximately 24 years old, 5'9", medium build. Complainant broke away from subject and called Patrol and was taken on tour of area in an effort to identify the subject.

5/8/73 Breaking and entering larceny of two typewriters. Two suspects observed in front of building 33. When they observed two Patrolmen approaching, they ran in the direction of the Albany garage. The cruiser was then busy with an escort. Check was made in building 33 area and two IBM typewriters were located in the bushes. Units had been removed from a room on the third floor. Entrance there was gained through an open transom over the door. Latent prints were taken from the

able. "It's a question of which way the Institute wants us to go," he said.

transom,

When asked, Olivieri noted that the Campus Patrol is a special branch of the state police force, having full police powers, but only while on MIT property or while in fresh pursuit of a person leaving MIT property.



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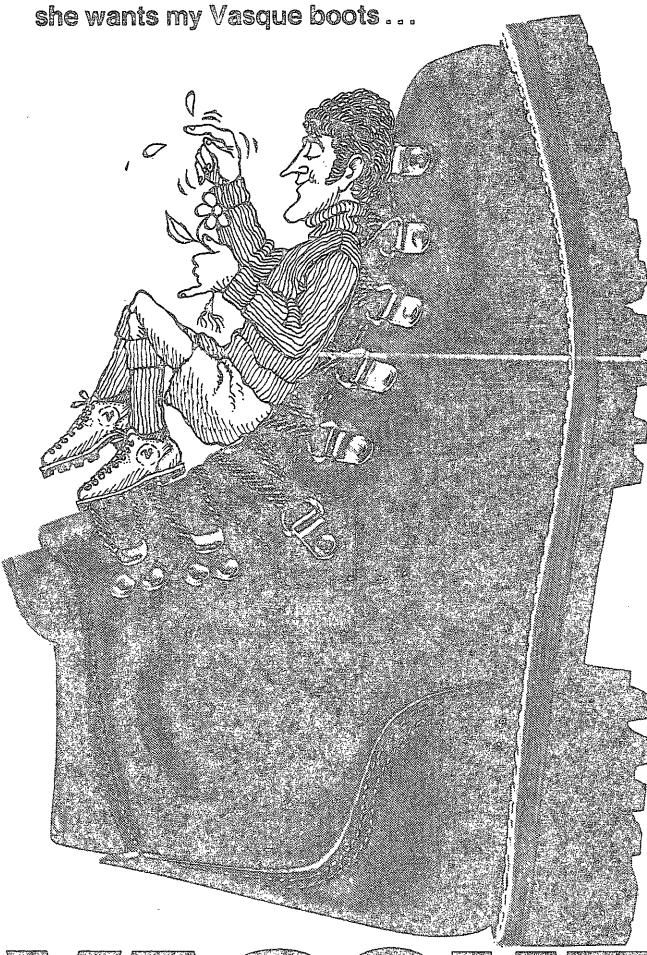
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A1 League					
	won	lost	tie		
Africans XI	4	0	0		
Baker A	2	2	1		
Green Building	2	2	0		
East Campus	1	2	2		
Westgate	1	2	2		
Theta Delta Chi	1	3	1		

MIT crew squads seeded in Easterns

Nutrition

Hellenk Athletic 1 Phi Beta Epsilon 1 Club Latino 0

Fiji A

By Mike McNamee

Seedings have been announced for the Eastern Association of Rowing Colleges Spring Championships, which MIT oarsmen will compete in tomorrow.

Six MIT boats will compete in the Sprints, which will determine the Eastern crew championships. The varsity, JV, and first freshmen boats from the heavy and lightweight squads will go to Worcester, where the races will be held.

The varsity heavies are seeded eighth, behind Northeastern, Harvard, Brown, Wisconsin, Penn, Navy and Syracuse. Their heat (there are three heats on each level, followed by petit and grand finals) includes Harvard, Penn, Dartmouth, and Boston University; two boats from each heat will go to the finals. The heavies defeated Columbia in the season opener, but have lost to NU, Harvard, and Wisconsin since then.

The JV heavies are also ranked eighth, and will race Harvard (seeded 1st), Cornell (3rd), Navy (5th), and Wisconsin. The top three boats from this heat will advance to the finals. The frosh heavies, who started the year strong by beating Columbia and NU before losing to Harvard and dropping a close race to Dartmouth, are seeded fifth. They are predicted to finish behind Harvard, Penn, NU (MIT coaches are puzzled by the placing of Northeastern above MIT), and Dartmouth. They will race Penn, Yale and Syracuse, and must finish first or second to

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qualify for the finals.

On the lightweight level, the varsity is placed fifth, behind Princeton, Harvard, Navy, and Penn. The MIT lights are 4 and 3 for the season, after losing by six inches to Navy last weekend. Their heat includes Princeton, Cornell, Navy, and Yale. The JV lights have exactly the same seeding, with the same schools in the same places as in the varsity race; their heat, however, includes Columbia in place of Cornell.

MIT's hopes for Saturday seem to ride on the shoulders of the frosh heavies and the frosh lights. Coaches Fraser Walsh and Lauren Sompyrac have some of the best seeds and lightweight coach Jack Frailey's boats are right up there with them.

Theta Chi	5	0	0
Senior House	4	1	0
LCA	2	3	0
NRSA	2	3	0
Phi Delta Theta	2	3	0
PKA/DKE	0	5	0
B2 L	eague	:	

B2 Le	ague	:	
SPE	3	0	1
AEPi	1	0	3
Bexlev	1	1	2
Delta Tau Delta	1	1	2
Pi Lambda Phi	0	4	0
C1 Le	eague	e	

C1 Le	agu	e	
MacGregor D/A	5	0	0
Con 3/Rus Hse	2	1	2
Math	2	1	2
Kappa Sigma	2	3	0
Chi Phi	1	3	1
Phi Kappa Sigma	0	4	1

C2 Le	agn	e	
MacGregor H	3	1	0
ATO	1	1	2
Phi Sigma Kappa	1	1	2
Sigma Chi	1	1	2
Burton H Tooey	1	3	0

C3 Le	ague	e	
Burton Smokers	2	2	(
MacGregor E	3	1	(
Theta Xi	2	1]
DP/SN	1	2	
Phi Mu Delta	0	4	(

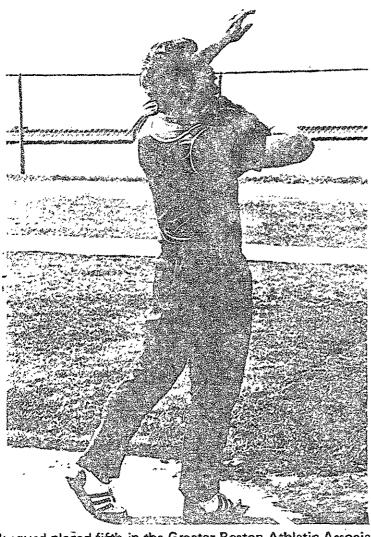


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The MIT track squad placed fifth in the Greater Boston Athletic Association track and field championships behind winner Harvard's 127 points. The top five team scores were as follows: Harvard 127, Northeastern 79, Boston College 30½, BU 25, and MIT at 24. In individual categories, co-captain Brian Moore '73 (left) garnered half of MIT's 24 points by placing first in the hammer throw with a toss of 187'4" (a personal best for Moore), and third in both the discus and shot put with tosses of 114'9" and 50'7" respectively. In other competition, Dave Wilson '73 placed fourth in the pole vault



with a vault of 15', Gary 'sugar bear' Wilkes tied for second in the 220 yard dash at 22.7, John Pearson '74 took fourth in the hammer throw, and Bill Leimkuhler '73 (shown on the right) placed fifth in the 440 intermediate hurdles with a time of 55.9 seconds. The MIT 440 relay team of Wilkes, Elliot 'flash' Borden '73, George Chiesa '74, and Jimmy Banks '76 brought home third place honors with a time of 43.1 seconds.

Photos by Fred Hutchison

Sportz

MIT baseball team loses four, wins one

By Dan Gantt

A 12-7 win over Bates was the only bright spot in recent MIT baseball action as losses to Northeastern, Bowdoin, Tufts, and Lowell Tech extended a slump that has seen the Tech nine drop eight out of their last ten contests.

MIT has certainly had its opportunities. Over the past five games Engineer batters have averaged nine hits per contest, but at the same time have stranded eleven runners per game. This combined with 17 errors afield appears to explain the slump.

The Bates contest offers a plendid example. Flawless fielding and timely hitting turned right baseknocks into 12 runs and a victory. Falling behind by three early, MIT fought back to tie the game in the second inning and exploded for seven runs in the fourth to sew up the game. A three-run homer by starting pitcher and winner Dave Yauch '75 highlighted the upsurge, which paraded 12 MIT players to the plate. Vince Maconi '76 drove in three runs with a homer and a single and Steve Reber '74 collected two RBI's on two singles to lead the MIT attack for the game.

Greater Boston League contender Northeastern had to scramble for its life two days earlier to defeat MIT 8-5. Four runs over the final two frames decided the contest after the Tech nine had jumped ahead with four scores in the seventh,

two coming in on Kevin Rowland's '74 bases-laoded single. Two hits by Herb Kummer '75 and RBI doubles by Dave Tirrell '74 and Rick Charpie '73 helped keep MIT close, but simply were not enough.

The 3-1 loss to Bowdoin was particularly frustrating as freshman John Cavolowsky hurled a fine six-hitter. However, nine MIT hits could only be cashed for a solo run in the ninth. Eleven players left on base effectually sealed MIT's doom. Tirrell, Charpie, and Reber each collected a pair of singles in the contest.

MIT's most recent outings, home contests against Tufts and Lowell Tech, have been nearly disastrous. Fourteen MIT errors opened the floodgates for eight unearned runs in 6-3 and 7-3 losses respectively.

The MIT squad outhit Tufts 12-5 on Monday, but to no avail. Stranding 13 baserunners and committing eight miscues, MIT was fortunate to lose by only three. Solid pitching by Mike Royal '76 and Bill Billing '73, and strong offensive support from Tirrell, Rowland, Reber, and Kummer kept the game tight.

MIT left their gloves home the following day also, allowing Lowell Tech four unearned tallies via six MIT errors. Tirrell was outstanding at the plate rapping out four singles in five appearances but was perhaps the only star on a cloudy evening for MIT.

Women sailors win two

As the spring sailing season neared its end last weekend, MIT's men's varsity squad placed a disappointing fourth in the New England Championships sailed at the Yale Corinthian Yacht Club in Branford, Connecticut.

The team got off to a slow start on the first day of the two-day event, and was never quite able to make up the deficit. Steve Cucchiaro '74, sailing in B-Division with Bob Longair '73 as crew, finished strong with places of 2-1-2-1-1-1 in the final six races to take low-point honors for his division. Alan Spoon '73, with Dean Kross '73, Chuck Tucker '75, and Walter



The fifteenth annual Sports Awards Banquet, honoring Tech's top athletes, will be held Tuesday evening at the MIT Faculty Club at 6:30 pm.

The featured speaker of the banquet will be Dr. Jerome H. Holland, a member of the MIT Corporation and former Ambassador to Sweden. Dr. Holland, a former All American football player from Cornell, was recently presented the Distinguished American Award by the National Football Foundation.

Frank '74 crewing, sailed for MIT in A-Division.

Results of the regatta were: Yale 85, Coast Guard Academy 86, Tufts 93, MIT 97, University of Rhode Island 106, Brown 107, Harvard 109, Boston College 118, Boston University 146, and Northeastern 153.

On Saturday, John Avallon '73, with Dave Johnson '74, crewing, and Kevin Sullivan '73, with Diane Gilbert '75 as crew, sailed to a first-place finish in a Dinghy Invitational held at MIT. Sullivan placed first in B-Division, while Avallon was runner-up in "A."

Results of the regatta were: MIT 23, Harvard 25, Tufts 26, Coast Guard 42, Trinity 46, University of Maine/Portland 61, Northeastern 62, University of Massachusetts 90, Boston College 95, and Holy Cross 106.

The MIT women's varsity squad won both their regattas over the weekend, capturing the Regis Bowl and the Powder Puff Trophy.

En route to placing first in the Regis Bowl Regatta, sailed on Saturday at Tufts, Maria Bozzuto '73, with Penny Butler '75 crewing, was low-point skipper in A-Division. Shelly Bernstein '74, with Joan Pendleton '76 as crew, sailed in B-Division. MIT headed the seven-school fleet with 18 points, followed by Radcliffe with 23 and Jackson 25

On Sunday in the Powder Puff Trophy at Rhode Island, Bozzuto and Butler again finished first, ten points ahead of second-place Stonehill. Results of the event were: MIT 12, Stonehill 22, Rhode Island 25, Albertus Magnus 29, Salem 32, Radcliffe 36, and Mount Holyoke 59.

Tomorrow and Sunday, Cucchiaro, Sullivan, Tucker and Erb will compete in the New England Singlehanded Championships, to be held at MIT.

The entire New England sailing community was saddened by the news of the death of Manton Scott of Tufts, who died on Sunday when the mast of his boat struck a high-voltage line. He will be missed as both a great competitor and a great friend.



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